

# THE EVOLVING MARKET FOR NORDIC PLANT-BASED FOOD PRODUCTS

A company perspective

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International Business

Bachelor's Thesis

Supervisor: Pasi Rikkonen

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### Objectives

The main objectives of this study are to explore the changes in the market that have helped Nordic plant-based food companies develop their business and identify the strategies that Nordic plant-based food companies have in their niche market from a domestic and international perspective. Finally, the purpose of this thesis is to research the future outlooks of the market, focusing on domestic growth and international expansion.

### Summary

The phenomenon of following a plant-based diet or consuming more plant-based products has been rapidly growing around the world, especially in the Nordic countries due to increased awareness about animal cruelty, the environmental destruction caused by animal agriculture and the negative health effects of increased meat consumption. Simultaneously, meat consumption has continued to rise in the Nordic countries in some consumer segments. In this thesis, a combination of existing literature and empirical research are used to explore the subject. Qualitative interviews were conducted with industry experts working in Nordic plant-based food companies in order to meet the research objectives stated above.

### Conclusions

This research concluded that many Nordic plant-based food companies, especially in Finland and Sweden, have successfully reacted to the changes in the market and identified the opportunities to succeed internationally as future market leaders. The companies are branching out of their niche markets and targeting larger consumer segments, making Nordic plant-based food products more accessible and appealing for everyone. In addition to the motives for purchasing plant-based products mentioned above, price, taste and availability can affect consumer choices to purchase plant-based products significantly.

**Key words:** plant-based, vegan, vegetarian, flexitarian, Nordic plant-based food companies, market overview, niche market

**Language:** English

**Grade:**

## TABLE OF CONTENTS

1. INTRODUCTION .....	1
1.1 Background .....	1
1.2 Research Problem.....	2
1.3 Research Questions.....	2
1.4 Research Objectives .....	2
1.5 Definitions .....	3
2. LITERATURE REVIEW .....	4
2.1 Plant-based Diets .....	4
2.1.1 Environmental Aspects .....	4
2.1.2 Global Food Security.....	5
2.1.3 Health Aspects .....	7
2.1.4 Ethics and Animal Welfare .....	8
2.1.5 Animal Activism.....	10
2.1.6 Veganism .....	11
2.1.7 Flexitarianism .....	12
2.2 Plant-based Food Industry in the Nordic Countries.....	13
2.2.1 Strongest Drivers of Change in the Market .....	13
2.2.2 Increased Meat Consumption .....	15
2.3 Consumer Motivations for Plant-based Purchases.....	16
2.4 Conceptual Framework .....	18
3. METHODOLOGY .....	20
3.1 Methodological Approach.....	20
3.2 Choice of Method .....	21
3.3 Sample Size .....	22
3.4 The Interview Process.....	23
3.5 The Analytical Process.....	24

4. FINDINGS .....	25
4.1 Plant-based Food Market in the Nordic Countries.....	25
4.1.1 Recent Changes in the Market for Plant-based Food Products .....	25
4.1.2 Causes for Change .....	26
4.1.3 Availability for Plant-based Food Products in the Nordics.....	27
4.1.4 Consumer Segments .....	28
4.2 Nordic Plant-based Food Companies.....	29
4.2.1 Consumer Consideration .....	29
4.2.2 Strategies for Competitive Advantage and Strengths in the Market.....	30
4.2.3 Opportunities and Strengths of Nordic Plant-based Companies .....	31
4.3 International Expansion for Nordic Plant-based Food Companies .....	32
4.4 Challenges in the Market.....	34
4.5 Future Outlooks of the Market.....	36
5. DISCUSSION AND ANALYSIS .....	38
5.1 Nordic Plant-based Food Market.....	38
5.2 Opportunities for Growth for Nordic Plant-based Food Companies.....	40
5.3 Challenges in the Market.....	41
5.4 Future Outlooks of the Market.....	42
6. CONCLUSIONS .....	43
6.1 Main Findings.....	43
6.2 Implications for International Business .....	44
6.3 Limitations .....	45
6.4 Suggestions for Further Research.....	45
REFERENCES .....	47
APPENDICES .....	52
Appendix 1: The Question Plan for the Interviewees.....	52

# 1. INTRODUCTION

## 1.1 Background

The phenomenon of following a plant-based diet or consuming more plant-based products has been rapidly growing around the world, due to increased awareness about animal cruelty, the environmental destruction caused by animal agriculture and the negative health effects of increased meat consumption.

The plant-based food market is especially growing in the Nordic countries and demand for plant-based products is increasing. In a survey by Ernst & Young (Kirk, 2018), it was found that 24% of Nordic consumers predict they will eat less meat in the next five years and 34% said they would eat more vegetarian food. There is a wide range of entirely plant-based food companies emerging, and larger enterprises have also picked up on the trend and are creating vegan products to answer consumer demand in the Nordics. In Lindgren's article about the popularity of plant-based drinks, Kukkonen from Kaslink Aito states that the emergence of plant-based products is becoming a global megatrend and is changing eating habits (Lindgren, 2018). Previously plant-based products were popular mainly amongst vegans and vegetarians, but increasingly flexitarians and people who don't follow a specific diet are causing a surge in the demand for plant-based products (ibid).

Despite the rise in consumption of plant-based products, meat consumption continues to rise in the Nordic countries as well (Lihatiedotus, 2017). However, consumers are shifting away from red meat.

The research in this thesis is focused on the industry knowledge of professionals working in Nordic plant-based food companies. Firstly, literature regarding the plant-based movement in general and in the Nordic countries will be critically analyzed and will provide a theoretical background and framework for the study. The following sections will study the changes in the market, Nordic plant-based companies and the future outlooks of the market by analyzing and discussing the empirical data from the interviews conducted. The findings from the interviews will also be compared and reflected with the findings in the literature.

## **1.2 Research Problem**

The plant-based food phenomenon is becoming a global megatrend. The Nordic countries have many forerunner companies saturating the market and demand is increasing in many different consumer groups. The Nordic plant-based companies also have opportunities in international expansion as the market is developing rapidly compared to other countries.

There is a significant amount of research conducted on vegetarianism, veganism and the consumer behavior of plant-based consumers in the Nordic countries. However, there is less research on the Nordic plant-based food market, especially from a company and industry-wide perspective. This thesis offers valuable information of the current state of the plant-based food market in the Nordics and how it is evolving. It also discusses the strengths and opportunities that Nordic forerunner companies have in the market.

## **1.3 Research Questions**

The purpose of this thesis is to answer the following questions:

1. How have Nordic plant-based food companies reacted to the changes of consumer demand in the food market?
2. How have forerunner companies identified their opportunities in their niche market (both domestically and internationally)?
3. What is the future outlook of the market for the companies, especially regarding domestic growth and international expansion?

## **1.4 Research Objectives**

The research objectives for this thesis are the following:

1. To study the changes in the market that have helped Nordic plant-based food companies develop their business.
2. To identify the strategies Nordic plant-based food companies have in their niche market from a domestic and international perspective.



3. To explore the future outlooks of the market, focusing on domestic growth and international expansion.

## 1.5 Definitions

*Plant-based food products:* Plant-based food products are foods that don't contain any animal derived ingredients. Although fruits and vegetables, for example, are plant-based foods, plant-based products such as tofu and alternatives to animal-based products (such as plant-based dairy and meat alternatives) are emerging and this research studies companies who produce these types of products.

*Niche market:* "A niche market is a focused, targetable portion of a market.

By definition, then, a business that focuses on a niche is addressing a need for a product or service that is not being addressed by mainstream providers." (Ward, 2018)

*Vegetarianism:* The common definition of a vegetarian is someone who abstains from eating red meat, poultry or fish. Most vegetarians do however eat dairy and eggs (Ruby, 2012). Vegetarianism can be difficult to define due to inconsistencies in literature and variations in self-identified vegetarianism (ibid).

*Veganism:* Veganism is a form of vegetarianism, and people who follow a vegan diet do not consume or use any animal-derived products and consume only plant-based products (Ruby, 2012; Rosenfeld and Burrow, 2017a).

*Flexitarianism:* "The term flexitarian is a union of the words 'flexible' and 'vegetarian'" (de Boer et al. 2014: 127). Mariotti (2017) describes a flexitarian as someone who predominantly follows some type of a vegetarian diet but sometimes includes products outside that diet such as meat or fish. A synonym sometimes used for a flexitarian is "semi-vegetarian".

*Nordic countries:* The Nordic countries are Finland, Sweden, Norway, Denmark and Iceland. (www.norden.org, n.d.)

## **2. LITERATURE REVIEW**

### **2.1 Plant-based Diets**

Most of the literature regarding the subjects of veganism, vegetarianism, flexitarianism and the plant-based food market in general has been published in the last decade. According to Mousel & Tang (2016), plant-based alternatives to animal-based products have gained more attention in recent years. Knowledge about environmental issues, health impacts and concerns about animal welfare receive more attention in the media and people are more aware of the impact their diet may have on others and on the climate (Raphaely, 2014; Ruby, 2012; PBL Netherlands Environmental Assessment Agency, 2011; Beverland, 2014). This section will discuss relevant topics regarding the plant-based diet and delve more deeply into the definitions of veganism and flexitarianism.

#### **2.1.1 Environmental Aspects**

The negative environmental impact of animal agriculture has been officially recognized for over a decade and there is a growing concern over the sustainability of meat-based diets (Raphaely, 2014; Judge & Wilson, 2015; de Boer et al., 2014; NIBIO & Nofima, 2018). Various studies have shown that producing plant-based protein for food consumption compared to animal-based protein is significantly more sustainable (Carlsson, 2009; Reijnders & Soret, 2003). Different estimations exist about the actual impact it has on the planet. In the EU, around 10% of greenhouse gas emissions (GHGs) come from livestock (PBL Netherlands Environmental Assessment Agency, 2011). According to the United Nations Food and Agriculture Organization (FAO) (2006), livestock activities contribute an estimated 18% of all anthropogenic GHGs. Out of all emissions regarding agriculture, livestock emissions constitute nearly 80%. However, Goodland and Anhang (2009) argue that this figure vastly underestimates the actual environmental impact of livestock production. It is suggested that taking into consideration the emissions from respiration, land use and methane, livestock production could potentially account for at least 51% of all GHGs (Goodland & Anhang, 2009; Beverland, 2014).

In addition to GHGs, livestock production pollutes waters and air, uses unsustainable amounts of water, creates soil erosion, deforestation and damages natural habitats for other species (Lea & Worsley, 2001; PBL Netherlands Environmental Assessment Agency, 2011; Raphaely, 2014; FAO, 2006; Henning, 2011). Animal waste which contain antibiotics and hormones, fertilizers and effluents from slaughterhouses pollute underground water supplies and damage marine ecosystems (FAO, 2006; Henning, 2011). The FAO (2006: xxii) even states that livestock production “is probably the largest sectoral source of water pollution, contributing to eutrophication, “dead” zones in coastal areas, degradation of coral reefs, human health problems, emergence of antibiotic resistance and many others.”

Measuring the different direct and indirect effects of livestock production can be difficult and it is nearly impossible to get a completely accurate result. Measurement methods are varied in the aforementioned studies and conducted in different countries where agriculture methods may be different. Many of them take into consideration only part of the aspects. For example, Goodland and Anhang (2009) criticize the FAO for completely leaving out multiple aspects that affect the GHGs in addition to falsely categorizing some emissions. Goodland and Anhang (2009) further analyze additional aspects of animal agriculture and build on the information provided by the FAO. Although the estimations of the environmental impact of livestock production vary, it can nevertheless be concluded that it causes a concerning effect on the planet and therefore is an important issue to be discussed.

### **2.1.2 Global Food Security**

Meat production and consumption also cause a problem with global food security (Reijnders & Soret, 2003). As populations and incomes continue to increase, demand for livestock products is increasing and is expected to double from 229 million tons 1999/01 to 465 million tons by 2050, the FAO (2006) reports. Because animals consume far more energy than can be converted into edible biomass, converting plant-based energy and protein into edible animal-based protein is a highly inefficient use of resources (PBL Netherlands Environmental Assessment Agency, 2011; Henning, 2011; NIBIO & Nofima, 2018). Henning (2011) reports that one third of all grain produced globally is fed to livestock animals. In the EU livestock industry, each

animal consumes 3 kg of feed every day, which in turn results in 0,1 kg of meat and 0,8 kg of milk (PBL Netherlands Environmental Assessment Agency, 2011). When 70% of the agricultural area in Europe is used for livestock production (ibid), it can be argued that it is not as sustainable as producing plant-based proteins that are directly meant for human consumption.

Alexander et al. (2017) states that the land use in ruminant meat production is high and therefore requires increased land areas. Although there is evidence that meat production is not as sustainable as production of plant-based products, there are vast differences in the sustainability of different ways of producing meat. Approximately half of all animal feed globally is imported from countries such as Brazil, Argentina and the US (The Council for the Environment and Infrastructure, 2018). PBL Netherlands Environmental Assessment Agency (2011) reports that the EU imports around 35 million tons of soybean meal from Brazil and Argentina, which contributes to the destruction of the Amazon rainforest. However, ruminants, such as cows, are also able to feed on non-arable crops which can reduce the need for feed produced on cropland. Therefore, mainly grass-fed ruminants who can feed from land unsuitable for crops can provide some benefits. However, it would imply a shift away from “intensive production practices, i.e. that use large quantities of feed produced from cropland” (Alexander et al., 2017: 30) This also means that consumption of ruminant meat would need to decrease to avoid unsustainable use of land (ibid).

Henning (2011) adds that eliminating confined and unsanitary conditions for livestock and adopting pasture-based livestock production, would decrease the need to use antibiotics. The risk of spreading infectious diseases and the risk of development of resistance to antibiotics would decrease, thus benefiting food security. Henning (2011) argues that pasture-based livestock is more expensive to produce, therefore the rising costs of meat would lead to decreased amount of meat consumption.

Although animal diseases cause a risk to food security, in the Nordic countries, meat production is not as large as in other European countries and the disease rates of livestock are among the lowest in the world (Kortesniemi, 2000). The regulations of food safety in the Nordic countries are often stricter than EU legislation, which does make Nordic animal-based products safer than products from other countries (ibid).

Lappalainen (2012) reports that 85% of the ingredients used in food production in Finland are of domestic origin, which also points to high food security in the Nordics.

Based on the existing literature, adopting more pasture-based livestock production would decrease the amount of meat being produced and the quality and safety of the products would increase. Releasing cropland to produce plant-based food for humans would also be a more sustainable way of using resources. In addition, this would contribute to the rising popularity of plant-based products.

### **2.1.3 Health Aspects**

Negative health effects of animal-based diets for humans have also become more widely recognized (NIBIO & Nofima, 2018). Plant-based diets are considered more healthful in many ways, as they contain less saturated fat and cholesterol and are higher in folate, antioxidants, dietary fiber, carotenoids, phytochemicals, potassium, magnesium and vitamins E and C (Craig, 2009; Lea & Worsley, 2001). People who follow a vegan diet are often thinner, have lower blood pressure and a reduced risk of suffering from cardiovascular disease, various types of cancer and diabetes (Craig, 2009; Kirk, 2018; Vinnari, M. et al., 2009). Appleby et al. (1999) conducted The Oxford Vegetarian Study with 6,000 vegetarians and 5,000 non-vegetarians in the United Kingdom during 1980-1984, the overview being published later. The study concluded that vegetarians and vegans had a lower mortality rate than non-vegetarians for both ischemic heart disease and all causes of death.

Multiple sources argue that a plant-based diet has more positive health effects than a meat-based diet. The risks of following an entirely plant-based diet should be considered regardless. Craig (2009) explains that vegans can experience deficiencies in vitamins B12 and D, calcium and long-chain n-3 (omega-3) fatty acids. It may be necessary for vegans to take supplements.

Even though the evidence regarding the health benefits of a plant-based diet is extensive, it is necessary to consider how these conclusions have been made. When conducting surveys about which diet people follow, there are often discrepancies since people can mean a wide variety of diets when they identify themselves as

vegetarian, for example. This can result in inaccuracies in the studies, since it is hard to know exactly what each individual consumes. Vinnari et al. (2009: 486) explains that some of the self-identified vegetarians in their survey were from a lower income status or elderly. The article draws the conclusion that some of the respondents might have confused the question “Do you follow any special diet – such as a vegetarian diet?” with the question ‘Do you include vegetables in your diet?’ Vegetarianism can also be considered a positive behavior and some people might want to relate to it, without actually practicing the diet (ibid). This can also affect survey results. In Vinnari et al.’s study, the amount of self-identified vegetarians was double the number of vegetarians who actually followed the operationalized definition of the diet. Hence, self-identification might not be the most accurate way of measuring vegetarianism and health-related studies can be inaccurate. Furthermore, many of the more extensive studies, such as The Oxford Vegetarian Study (Appleby et al., 1999), were conducted decades ago and might not prove accurate today. Regardless of minor inconsistencies, the amplitude of evidence in favor of plant-based diets argues that it is indeed more healthful than a meat-based one.

#### **2.1.4 Ethics and Animal Welfare**

During the past few decades, ethical concerns over the quality of animals’ life has increasingly gathered attention and been a subject of controversy (Fraser et al., 1997). Animals are sentient beings who can experience pain and pleasure as well as other emotions such as fear (Lappalainen, 2012; Fraser et al., 1997). Animal welfare issues and the ethical dilemma of killing animals for food are important aspects of increasing awareness of the role of plant-based products in the diet.

“Humans don’t *need* to kill creatures in order to survive or even thrive” unlike carnivores do, and therefore killing them is a choice that needs to be justified (Henning, 2011). People’s perception of animals has changed over time but Lappalainen (2012) explains that the modern perception is largely based on philosopher Jeremy Bentham’s argument. According to Bentham cited in Lappalainen (2012), animals are sentient beings, regardless of whether they are as aware as humans of their surroundings. Bentham argues that humans have the obligation not to cause pain to animals (Lappalainen, 2012).

Lappalainen (2012) also explores multiple other ethical theories by different philosophers. One theory, based on the Peter Singer's book "Animal Liberation" (1975) argues that it is immoral to harm the interests of animals, and their will to live is one of those interests (ibid). Another theory created by Tom Reagan in his book "The Case of Animal Rights" (1983) cited in Lappalainen (2012) proposes that an animal's value is not dependent on its needs, but that an animal has intrinsic value as itself. Reagan bases his theory on the equal rights of humans and argues that different species should have equal rights just as different races should, for example. Reagan's theory has been seen as quite radical (ibid). Different theories about ethics concerning animals have emerged but they often question the human superiority and why humans believe they have the right to harm animals for their own benefit.

In Elina Lappalainen's book titled "Syötäväksi Kasvatetut" (*Raised to be Eaten*) (2012) describing the production process of chicken, pork, eggs and beef in Finland, she visits multiple farms herself and reports on the well-being of the animals. It is important to note that the author is neither vegan nor vegetarian and the book aims to give a neutral perspective on animal agriculture practices and what happens behind closed doors. Well-being for animals can be defined as having the ability to practice natural behavior to their species (Lappalainen, 2012; Fraser et al., 1997). For example, mother pigs have an innate need to build a nest for their piglets. If they are unable to do that in a factory farm, it poses a well-being issue (Lappalainen, 2012).

Meat consumption is increasing, and consumers are simultaneously expecting it to be cheaper (Hodges & Han, 2000; Lappalainen, 2012). Cheaper meat products often lead to poor and unnatural conditions for animals (Lappalainen, 2012; Alexander et al., 2017; Henning, 2011; Sandøe et al. 1999). Lappalainen (2012) challenges the reader to consider whether it is morally justifiable to pay a low price for meat produced in bad conditions compared to buying meat less often and paying more for higher-quality conditions for the animals. Alexander et al. (2017) and Henning (2011) also state that better quality conditions for animals require higher production prices and would thus lower the volume of meat production and consumption. Mceachern and Schröder (2002) studied the role of livestock production ethics in consumer

values towards meat and found that many consumers chose not to think about the origins of the meat they purchased because it was off-putting or would pressure them to stop eating meat. Lappalainen (2012) argues that consumers should be aware of the origins of the products that are in their shopping cart. She believes that each animal's life should be valued individually and not only seen as part of a process.

In the Nordic countries, the Animal Welfare Act is considered to be relatively strict and ranked high in global comparison (Djurens Rätt, 2009). Especially on organic livestock farms, animals have the right to be outside for a large part of their lives, practice behavior innate to their species and the farming methods are more traditional (Lappalainen, 2012; Mceachern and Schröder, 2002). Organic farms in Finland, for example, are inspected and reviewed annually which decreases the risk of animals living in poor conditions (Lappalainen, 2012). On the other hand, normal farms are only inspected randomly, posing a higher risk for negligence of animal welfare (ibid). Organic livestock production is still relatively small compared to regular factory farming (ibid).

As ethical concerns and awareness presented in this section have risen in the Nordic countries, an interest towards purchasing more plant-based products has also occurred.

### **2.1.5 Animal Activism**

Lappalainen (2012) also discusses the opposition of animal activists and government officials. She argues that even though animal activists can be seen as radical at times, they are also raising awareness on subjects that governments don't always bring up. Animals don't have a voice of their own, but activists can speak for them (ibid). Many governments have based their animal welfare laws on only minimizing pain and suffering for animals and activists often argue that that isn't enough (ibid).

The organization "Oikeutta Eläimille" (Justice for Animals) advocates strongly for animals and condemns all use of animals for human benefit (Lappalainen, 2012; oikeuttaelaimille.com, n.d.). Although they are often seen as extremely radical, especially after they have broken into multiple animal farms and filmed the conditions



of the animals without permission, one of the videographers, Karry Hedberg, defends his actions as being necessary since the animals can't help or speak for themselves, Lappalainen (2012) cites. It is often debated whether the actions of animal activists are justified but it is apparent that they raise awareness amongst the general public which often requires companies and governments to take action.

### **2.1.6 Veganism**

Vegan food is described as food that does not contain any ingredients that are animal-based (Janssen et al., 2016; Mariotti, 2017). Consumers who follow a vegan diet do not consume any animal products, meaning not only products where an animal is killed, for example, meat or gelatin, but also products from animal origin such as dairy, eggs and honey (ibid). Although a person that is strictly vegan does not use any animal-based products, including hygiene, cosmetic and fashion products (Mariotti, 2017), for the purpose of this research the term vegan will be used to describe people who follow a vegan diet without specifying whether they follow an entirely vegan lifestyle.

Rosenfeld and Burrow (2017a) explain that veganism is a form of vegetarianism and thus when discussing vegetarians, vegans are also a part of that category. Although veganism has gained increasing scientific attention, studies on people who are strictly vegan are still relatively rare. Studies about vegetarianism exist more widely, and often also cover veganism (Janssen et al., 2016). An issue that lies in the terminology of this research is that vegetarianism has notoriously been a difficult term to quantify and study. Ruby (2012) points out that the definitions of vegetarianism vary widely throughout different studies, especially with self-identified vegetarianism. Some self-identified vegetarians cut out all animal products whereas others occasionally consume meat, fish, dairy and poultry while still calling themselves vegetarians. Therefore, statistics and information about veganism and vegetarianism can be subject to inaccuracies.

Another term frequently used in this paper is plant-based, which also means something that is not derived from an animal. It is often used as a synonym for something that is vegan, though “plant-based” is considered a more neutral term than

“vegan”. Beverland (2014: 380) argues that “the term ‘plant-based diet’ is used deliberately to shift the focus to diet rather than identity or moral values, which are often the motivation behind vegetarian or vegan diets.”

### **2.1.7 Flexitarianism**

“The term flexitarian is a union of the words ‘flexible’ and ‘vegetarian’” (de Boer et al. 2014: 127). Mariotti (2017) describes a flexitarian as someone who predominantly follows some type of a vegetarian diet but sometimes includes products outside that diet such as meat or fish. A synonym sometimes used for a flexitarian is “semi-vegetarian”. Mariotti (2017) also states that it is hard to define how much a flexitarian actually eats products outside of their chosen diet; some might eat plant-based food only occasionally while others might eat animal-based food only occasionally. De Boer et al. argue that the meaning of the word flexitarian has shifted from vegetarians who occasionally eat meat to meat-eaters who do not eat meat every day. It is difficult to define precisely what type of consumption flexitarianism involves. Flexitarians can be thought of as people who are more aware and interested in purchasing plant-based products but are not committed to any specific diet. As with information regarding veganism and vegetarianism, flexitarianism is a term interpreted in various ways, which can also lead to inaccuracies.

De Boer et al. (2014) mentions that one reason for why people follow a flexitarian diet is because they want to eat more sustainably, but do not want to follow a dogmatic diet that restricts them from certain foods. The idea of strictly following a plant-based diet can sometimes trigger resentment amongst meat-eaters. Flexitarianism does not cause this due to the lack of a dogmatic approach (ibid).

It is important to include flexitarians in this thesis because they are a group that purchases plant-based products, especially meat and dairy alternatives. Mousel and Tang (2016) argue that they may be as large a group of consumers who buy plant-based alternatives as vegans and vegetarians. For people who are not strictly following a plant-based diet but want to decrease their consumption of animal-based products, the plant-based alternatives are a good option (ibid).

## **2.2 Plant-based Food Industry in the Nordic Countries**

The food industry in the Nordic countries is shifting to be more plant-based. The strongest drivers for change are coming both from consumers and governments, as evidence below will show. However, meat consumption has also increased in most Nordic countries (Lihatiedotus, 2017; Korttesmaa, 2018; NIBIO & Nofima, 2018) due to the price and convenience aspects.

### **2.2.1 Strongest Drivers of Change in the Market**

The popularity of plant-based food and following a more plant-based diet has increased in the Nordic countries, shifting consumption patterns and attitudes towards food (Kirk, 2018). The reasons for shifts in consumption are strongly related to environmental and health reasons due to increased awareness of environmental destruction caused by livestock production and negative health effects of animal-based diets compared to plant-based ones (NIBIO & Nofima, 2018; Kirk, 2018). In a survey conducted by Ernst & Young cited in Kirk (2018), it was found that 25% of Nordic consumers predict they will eat less meat in the next five years and 34% indicate they would eat more vegetarian food. According to the Swedish Youth Barometer, 30% of young Swedish people already eat more plant-based food because they want to reduce their carbon footprint (ibid). Kirk (2018) also states that about eight percent of 18-35-year-olds in Denmark consider themselves flexitarians. While the article provides many useful statistics about the attitudes Nordic consumers have towards plant-based diets and products, there are no sources provided for the studies mentioned and it is thus difficult to know the sample sizes and detailed information on who answered the surveys/interviews in order to review the validity of them.

Yhteishyvä (2018) released an article interviewing various people on their views of the changes happening in the Finnish food market and how they see the future of food in the next 20 years. Researcher Emilia Nordlund states that people's increasing awareness of climate change and population growth has created a larger demand for dairy and meat alternatives. She personally sees that the biggest change in her family's food consumption is trying more plant-based foods. She also predicts growth

in the market of alternatives during the next 20 years. Researcher Sami Koponen points out that stores also have to play a role in making a more sustainable future. Lappalainen (2012) agrees that stores should also actively make responsible choices on where to source their products and not only shift the responsibility to the consumer to confirm sustainable production and animal welfare. Anni-Mari Syväniemi from The Central Union of Agricultural Producers and Forest Owners and garden farmer Hanne Kinnunen both predict that food will become more plant-based in Finland over the next two decades. The selection manager of the S-group in Finland says ethics, sustainability and responsibility are trending. He thinks Finland has potential to be a forerunner in more ethical food production, for example with organic products and plant-based technologies. What is insightful in the article is that even though all the interviewees have different backgrounds and talked about different things regarding changes in the food market, the single constant was that each interviewee mentioned the movement to a more plant-based diet. Nonetheless, it has to be considered that these are mostly only predictions and based on the observations of the interviewees.

While meat consumption and animal agriculture cause environmental issues, they also cause other sustainability problems. The public health sector faces challenges in Nordic countries due to the diseases and health implications that animal products cause (Pohjolainen et al., 2016; Kirk, 2018). A plant-based diet is proven to reduce many health problems such as cardiovascular disease, cancer, osteoporosis and diabetes, which are all financial burdens for public sector health care (Kirk, 2018; Craig, 2009). This motivates governments to advocate for a more plant-based diet and to educate consumers to consume more sustainably. In Copenhagen, Denmark, a large majority in the City Council added ambition to make public meals more plant-based (Kirk, 2018). In Espoo, Finland, schools have begun offering vegan options every day to students (Riihola, 2018). Other Western countries have also made efforts to advocate for a more sustainable and plant-based future. Health Canada's Food Guide 2019 (BBC, 2019; Health Canada, 2019; Pointing, 2019) has almost entirely removed dairy from the recommendations which has been part of the central food policies in Canada and Western countries for years. The Council for the Environment and Infrastructure (2018) in the Netherlands aims to lower national

livestock production by 2030 in order to meet climate targets. They promote a more plant-based diet as more healthful and sustainable.

Some governments are beginning to make advancements for better treatment of farm animals. The current Animal Welfare Act in Finland was originally ratified in 1996 and has not been updated since. Starting from 2018, the Finnish Government has been processing a new Animal Welfare Act, which aims to improve the well-being of animals and clarify certain sections from the current Act (Autio, 2018). The Act is projected to be enforced in 2021 (ibid). However, the government has been criticized for prioritizing the producers rather than the animals in the Act, as the government has promised not to impose additional costs to producers. Better conditions for animals would require more funding, which makes what is prioritized in the new Act debatable (Suhonen, 2018). The law is currently being processed (eduskunta.fi, n.d.). Djurens Rätt (2009) reviewed Sweden's Animal Welfare Act compared to other countries'. Regarding cow grazing, Finland, Sweden and Norway are all ranked strong by international comparison, with cows being allowed to graze for two to four months a year, six hours a day (ibid). The overall assessment of Animal Welfare Acts by Djurens Rätt (2009) states that Switzerland leads with the most far-reaching legislation. Norway is also ranked higher than other Nordic countries (ibid).

### **2.2.2 Increased Meat Consumption**

Even though plant-based food is increasingly popular among Nordic consumers, meat consumption has also increased in the past years. According to Lihatie (2017), overall yearly meat consumption in Sweden had risen from 73,9 kg/person to 80,6 kg from the years 2012 to 2016. In Finland and Denmark, the overall consumption had decreased. In Denmark and Sweden, consumption of beef had decreased, especially in Sweden where consumption went from 25,4 kg/ per person to 21,1 kg. However, in Sweden, consumption of poultry skyrocketed between 2012 and 2016, going from 11,8 kg to 19,9 kg yearly. Also, in Finland the numbers went from 18,7 kg to 23,5 kg. The report shows that consumption of red meat decreased during the years but "white meat", for example, poultry increased. Luke (2018) found that poultry consumption has grown from 6,7 kg/ per person in 1990 to 24 kg/ per

person in 2016, which almost matches the result from Lihatie (2017) has. Yhteishyvä (2018) states that poultry sales have increased by 246% during that time period. However, beef sales have decreased 12% between 1990 and 2016 (ibid). Norway is not included in the EU statistics, but Helsedirektoratet (2017) cited in NIBIO & Nofima (2018) reports that meat consumption in Norway has increased by 45% since 1989.

Research has found that price and convenience play a significant role in the consumption decision of buying meat and meat-alternatives (Vainio et al., 2016). Price, taste and convenience can act as barriers for consuming plant-based protein as it is often priced higher than regular or low-priced meat products (Vainio et al., 2016; NIBIO & Nofima, 2018). Low pricing often increases demand (NIBIO & Nofima, 2018), which can prove difficult for plant-based food production since it is still relatively expensive to produce. As production quantities for meat analogues are still relatively small, labor costs and the lack of having automated machines to produce products can raise prices. In addition, high-quality ingredients were also mentioned as a reason for higher costs (ibid). Vainio et al. (2016) found in their research that people who were more influenced with price and convenience motives in their consumption and who did not consume any plant-proteins were more likely to not purchase them.

### **2.3 Consumer Motivations for Plant-based Purchases**

Various studies have examined the reasons why consumers purchase plant-based and vegetarian products. Since most of the literature is recent, the information provided describes the current situation well and helps in its analysis. The motivating factors identified for purchasing plant-based products that prevailed in nearly all studies were the negative environmental impact that animal agriculture causes, personal health reasons and ethical reasons. The importance and weight of each factor varied throughout the studies.

Ruby (2012) discusses various studies that report ethical concerns for the slaughter of non-human animals as the most important reason for being vegetarian. Personal health is the second most important reason cited, followed by the environmental

impact of meat consumption, and spiritual purity. In a study conducted in 2014, Janssen et al. (2016: 645-646) report that in seven vegan supermarkets across Germany, 89.6% of the respondents chose to follow a plant-based diet for animal-related reasons, such as “concern for animal welfare and/or animal rights, and other ethical aspects related to animals”. 69.6% made the choice due to self-related reasons such as “aspects related to personal well-being and/or health, including taste, pleasure, curiosity, and weight loss”, and 46.4% for environment-related reasons such as “concern for environmental protection, concern about climate change, and depletion of natural resources”.

This study is in line with the arguments of Ruby (2012) about the main reasons people follow plant-based diets. Although the study provides valuable information on the main motives, it does not specify whether the reasons are why the respondents started the diet or why they maintain it. The connection between the reasons why people choose a plant-based diet and how they are able to maintain it could provide useful information for the future and for the sustainability of the plant-based diet. The survey was conducted and only with people who identified themselves as vegans, excludes reasoning why people who do not strictly follow a vegan diet, but are nevertheless interested in purchasing vegan products, choose to purchase them.

Rosenfeld and Burrow (2017a) take a different approach to studying the motives of vegetarians. They create three psychological constructs to categorize the motivations to be vegetarian. The theoretical framework is called the Unified Model of Vegetarian Identity (UMVI) (Rosenfeld & Burrow, 2017b). Even though it consists of many similar reasons as mentioned above, it categorizes the motivations in a different way. “Motivation signifies an internalization that informs one's goals, assigns personal meaning to one's food choices, and directly stimulates one to follow a dietary pattern, which ultimately establishes the ‘foundation of vegetarian identity’” (Rosenfeld & Burrow, 2017b: 460).

Rosenfeld and Burrow (2017a, 2017b) argue that people are vegetarian due to “prosocial motivation”, “personal motivation” and/or “moral motivation”. “Prosocial motivation” means a person is motivated to be vegetarian in order to benefit someone other than themselves. This category includes not only helping the benefit

of the animals or other humans but can also mean benefiting the environment. “Personal motivation” combines different ways of wanting to benefit oneself. It can mean wanting to follow a more healthful diet or being vegetarian for religious reasons, explaining enlightenment as the personal benefit. The third category is “moral motivation”, which means choosing a vegetarian diet in order to do something that one perceives as the right thing to do. For example, concern for the morality of slaughtering animals for food would be considered moral motivation. An interesting point is made by Rosenfeld and Burrow (2017a) that being concerned about the morality of killing animals does not automatically mean wanting to benefit the lives of animals, therefore stating that the prosocial and moral motivation are two separate constructs and a vegetarian can have either both or only one of the motivations.

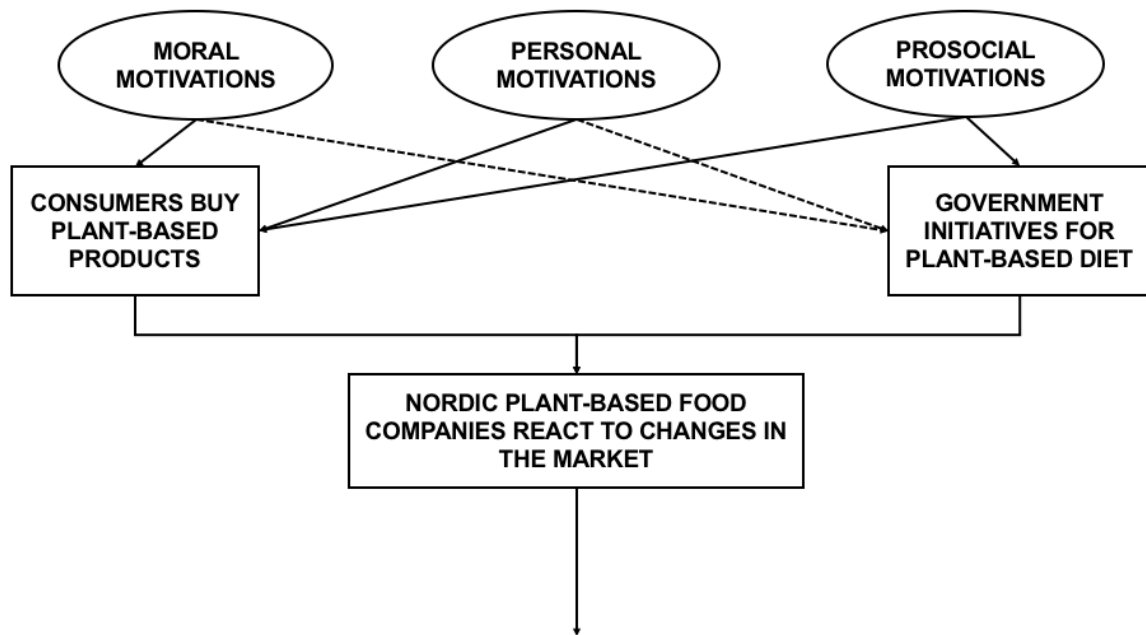
Rosenfeld and Burrow (2017a) study the same motivations that are mentioned in other literature as motivations to follow a plant-based or vegetarian diet, but interestingly divides the motivations into different types of constructs, which proves that even the same basic reasons to make certain choices can have different underlying constructs behind them and can be grouped in a different way.

It is important to study the motivations behind the purchases of plant-based products because food companies can gain insight in what to focus on when selling their products. Although much research exists on why vegetarians and vegans follow their diets and purchase plant-based products, companies could benefit from also knowing flexitarians’ motivations for plant-based purchases. This is an area of research that could be further explored in the future.

## **2.4 Conceptual Framework**

The change in the food market in the Nordic countries is demanding the food industry to respond and evolve. Figure 1 represents the framework that conceptualizes how the food market is changing and what Nordic plant-based food companies must consider in order to react to the change. The Unified Model of Vegetarian Identity (UMVI) created by Rosenfeld & Burrow (2017a) has been utilized to create the constructs on the top level that influence change.





*Figure 1*

As explained in section 1.3, the prosocial motivations mean wanting to benefit the greater good of something, for example, the environment or the welfare of animals. This is a reason for consumers to demand more plant-based options and a reason for governments to make initiatives for a better future. The personal motivation, for example, health-related reasons mainly affect consumer choices. A dotted line is connected to the government initiatives because by advocating for healthier diets, the “personal” motivation for governments could be reduced healthcare costs. Moral motivations also affect consumer choices, and research shows it affects especially the people who follow a stricter vegetarian or vegan diet. Moral motivations are connected to the government because they are being pressured to make more initiatives towards animal welfare, for example by the actions of animal activists. The dotted line represents the fact that governments also must consider livestock producers’ jobs and therefore can’t solely advocate for the animals.

Forerunner companies in the plant-based food industry must be aware of the changes in consumer demand and the growing awareness of sustainability, health related and ethical issues amongst the public in the Nordic countries. Consumers, government initiatives and companies together drive change in the market. Nordic plant-based food companies can be considered as niche companies serving a

specific target market. Their biggest market segments could be considered vegans, vegetarians and flexitarians.

The theoretical framework presented provides the basis for the empirical research conducted in this thesis. Studying the background of the growing popularity of plant-based products and gaining insight about the Nordic plant-based food market through existing literature helps to form the questions which will be further researched in the qualitative interview process. The existing information will be tested on how it correlates with the empirical data. The operationalization of the framework into the questions in the interview process will help answer the research questions in this thesis.

### **3. METHODOLOGY**

#### **3.1 Methodological Approach**

For this study, a qualitative method was chosen as the methodological approach. Whereas in a quantitative study, the research aims to answer the questions: “how much?” or “how many?”, qualitative research aims to understand a certain phenomenon and answer the question “why?” (Puustinen, 2013). Qualitative methods often uncover meanings and reasonings behind phenomena that are difficult or impossible to uncover with quantitative methods. However, the sample size for qualitative data is often significantly smaller than in quantitative methods, and defining validity and reliability is usually easier in quantitative methods. The two methods combined complement each other and quantitative data combined with the data from this research could provide further insight on the subject (ibid).

A popular method of qualitative research is interviewing. The purpose of the interview method is to find out how different people construct the meaning or reasoning for certain situations or phenomena and how significant the meanings are to them (Järvenpää, 2006). With this method, the interviewer asks the interviewees the questions directly and can make sure that the interviewee understands the topic and the questions (Puustinen, 2013). The sample size in qualitative data is usually limited

and must be well argued. The quality of the data is very important. The structure of interviews must be planned out thoroughly beforehand and the interviews are often transcribed for a more analyzable form for interpretation (ibid).

There are different types of interviews, such as structured or semi-structured and theme interviews or open interviews (Järvenpää, 2006). Semi-structured theme interviews are relatively informal, and the researcher is able to discuss the topic with the interviewee openly (Puustinen, 2013). The themes and questions are defined beforehand, but the answers aim to provide information on topics or fields of which there is less existing research or data. An advantage of semi-structured interviews is that the interviewee has the ability to ask further questions on certain topics and clarify possible misunderstandings during the interview. The following section will explain why this method was chosen to conduct the research.

### **3.2 Choice of Method**

The research questions of this study required elaborate answers and exploration of various different themes. The conceptual framework comprised of broad areas of motivation and left space for open discussion of the topic. Therefore, a qualitative method was chosen for this study, as the research focused on a company perspective and expert knowledge from industry professionals gives better insight into the market and company strategies.

Semi-structured theme interviews were conducted as the primary source of data for this thesis. Interviews were chosen instead of a questionnaire to companies, because they allow the interviewee to delve more deeply into the subject and more detailed information can be unveiled. The interview allowed the interviewee to discuss subjects outside of the question structure, and the interviewer was able to ask the interviewee to elaborate on questions when necessary in order to avoid misinterpretations and add valuable information to the data.

For this thesis the research was conducted on the Nordic countries: Finland, Sweden, Norway, Denmark and Iceland. The literature review provides evidence that the popularity for plant-based products is growing in the Nordic food market and the

empirical research strengthens that evidence. Many new Nordic plant-based food companies have emerged in the past few years bringing more variety and competition to the market. It was often mentioned in the interviews that the Nordic countries are market leaders in the plant-based food industry, Finland and Sweden being the leaders in the Nordics.

In addition to the primary source of data, this thesis also examines existing literature on the subject. It compares and combines the information from the primary and secondary data. The secondary data consists of various scientific journal articles, scientific books, newspaper articles, blog posts and other website sources, reports and statistics by governmental bodies or various organizations, acts of parliaments as well as theses. As the topic is very current and the market is developing constantly, a combination of current news articles and scientific research offer a versatile perspective.

### **3.3 Sample Size**

The interviewees were selected from a range of plant-based food companies. The companies that were chosen for the interviews were all of Nordic origin and were already established in the market and had a presence as a brand. The companies represented a wide range of different food products including plant-based dairy alternatives, different plant-based proteins and meat alternatives and ready-made plant-based meals. As the companies sold different types of products, their different perspective from the food market offered valuable results. Some sold their products in multiple Nordic countries, and some only in Finland so the expertise on the entire Nordic market varied throughout the interviewees. The interviewees had different job titles, but all had experience working in the Nordic plant-based food market and followed industry changes actively. Two of the companies were completely plant-based, but two companies had a separate plant-based product range and brand in addition to their other products. In these cases, only the plant-based brand was discussed. The interviewees are referred to with their last name in the thesis, except for the anonymous interviewee. One interviewee chose to be anonymous, so the name of the interviewee and the company is not stated.

<b>Name of the interviewee</b>	<b>Interviewee's job title</b>	<b>Company</b>	<b>Core operations</b>	<b>Current Markets</b>
Jouko Riihimäki	Commercial Director	Oy Soya Ab/ Jalofoods	Manufacturer of plant-based proteins such as tofu and tempeh	Finland, Sweden and Estonia
Anonymous	Nutrition Expert	Anonymous	Plant-based product line; manufacturer of plant-based ready-made meals	Finland
Siva Parlar	CEO	Vöner Oy	Manufacturer of plant-based food products, primarily plant-based döner kebab	Finland and Estonia (targeting Sweden in the near future)
Susanna Kallio	CMO	Kaslink Aito	A plant-based brand of Kaslink Oy; manufacturer of oat-based dairy products such as milks, yogurts and creams	Finland, Sweden, Denmark, Estonia, Germany, the Netherlands and China

### 3.4 The Interview Process

Four interviews were conducted in total, two in person and two over the phone. All four companies are Finnish companies but many of them operated in other Nordic countries and other countries globally. The language used to conduct the interviews was Finnish, as it was the native language of the interviewees and it allowed for expressive language. The interviewees gave permission to be recorded and all interview data was transcribed word for word. The interviews lasted approximately 30 to 60 minutes. All interviews were conducted during February and March 2019.

The interviewees were all very interested in the topic and felt the research topic was relevant and current. Many commented on the good structure and questions of the interview.

The interview structure allowed interviewees to speak openly about the topics and add relevant information if they felt something necessary to the research wasn't included in the questions. Some of the questions turned out to be overlapping as the interviewees answered with very detailed explanations on the topics, often covering question that were yet to come.

### **3.5 The Analytical Process**

After the interviews were held, all of them were transcribed. The analytical process began after three of the interviews were held. The transcription and analysis process were time-consuming. After transcribing the interviews, the information was coded to find answers to the research questions and to organize the data for more efficient and accurate analysis. The data was coded into a chart on Microsoft Word. There were four columns for all the interviewees and five rows for the themes from the interviews. The relevant data from the interviews was organized into emerging subcategories under each interviewee's own column and the different subcategories were coded into the relevant themes. The data was color coded to find similarities and combine the data from the different interviewees.

A mixture of priori coding and emergent coding methods was used. Priori coding was used to create the themes under which codes were categorized. The themes were created based on the interview themes and the framework from the literature review. Emergent coding was used to code emerging information from the interviews into subcategories. These subcategories were then organized to fit the different themes. This mixed methodology created the groundwork to categorize the data while simultaneously allowing different kinds of new information to be included. Sometimes interviewees answered questions under a certain theme in the interview that was more relevant to another theme. The method used allowed emerging information to be categorized freely, resulting in a more organized form of analysis.

## **4. FINDINGS**

This section will summarize the findings of the interview process. The data was sorted based on the coding method explained in section 3.4. The full structure of the interviews can be found in Appendix 1.

### **4.1 Plant-based Food Market in the Nordic Countries**

The first section explores the findings regarding the current state of the plant-based food market in the Nordic countries. Interviewees were asked questions on how they perceive the recent changes in the market for plant-based products, what has caused the changes, and how they perceive the availability of plant-based products currently in the Nordics.

#### **4.1.1 Recent Changes in the Market for Plant-based Food Products**

Parlar (2019) stated that much growth is happening in the market at the moment and Riihimäki (2019) also agreed that the plant-based movement is starting to grow more substantially now. Kallio (2019) explained that demand has grown immensely, and the anonymous interviewee (2019) stated that the segment of consumers who buy plant-based products has grown. Three of the interviewees mentioned that there has been a large consumption of plant-based products in Asia for hundreds of years, for example in India. Both the anonymous interviewee and Parlar agreed that in Western countries, especially in the Nordics, the topics of plant-based diets and products have gained more attention only in recent years.

Riihimäki stated that Finland and Sweden were the leading countries in the plant-based food market in the Nordics, with Norway following. Kallio agreed that Finland and Sweden are the most developed in the offering of plant-based products with the rest of the Nordic countries following. Riihimäki explained that the fish culture is still very prominent in Norway, as is the meat culture in Denmark.

#### **4.1.2 Causes for Change**

When discussing the causes of the changes in demand and market development multiple different reasons were revealed. Riihimäki stated that the media has affected the change in the market, as awareness of environmental issues and animal welfare concerns have risen. The anonymous interviewee and Parlar agreed that the growing awareness about climate and environmental issues and animal rights are underlying reasons for change in consumer behavior. According to Riihimäki, the ethical concern over eating animal-based products is a more prominent reason behind changes in Sweden compared to Finland. Kallio explained that the demand for plant-based products initially consisted of people who were allergic to something, for example dairy products, and was then continued by people who followed a plant-based diet for ethical reasons. More recently, the demand is increasing by people who are mainly interested in a healthier diet and more environmentally friendly and responsible consumption. She added that the attention received by plant-based products and brands in the media has attracted new customers. Riihimäki also stated that Nordic consumers are increasingly focusing on individualistic needs such as their own well-being and health, and people are more aware of the effects diet has on their health.

Parlar explained that one reason resulting in Nordic consumers changing their consumption towards more plant-based products has to do with food culture. He used France, Spain and Italy as examples of countries with a very deeply rooted food culture that has been prominent for hundreds of years. He compared these countries with the Nordic countries, which rely heavily on imported foods due to the cold climate. He did not deny that Nordic countries have their own food culture, rather he argued that Nordic countries are more open to take inspiration from other food cultures and adapt to new food trends. Parlar sees this as a reason why Nordic consumers have been more open to trying new things and adapting to the plant-based trend faster than the countries with a more deeply-rooted food culture.

The role of flexitarians in the development of the plant-based movement was also discussed with the interviewees. All interviewees agreed that flexitarians play a major role in the success of plant-based companies and the growing demand for plant-



based products. Riihimäki stated that previously mainly vegans and vegetarians purchased plant-based products, adding that they also had a big impact in raising awareness by being more vocal about the issues regarding animal-based products. However, more recently flexitarians have been the ones to substantially increase the demand for plant-based products simply because they are a larger group. The anonymous interviewee stated that vegans are still a very small group and agreed with Riihimäki that for many people following a strictly plant-based diet might be too radical of a change.

Parlar stated that without flexitarians, none of the completely plant-based companies would be able to succeed well. The proportion of flexitarians is large enough that companies should definitely direct marketing to them also, in addition to vegans, the anonymous interviewee states. According to Kallio, in a market research that Nepa Insight conducted for Kaslink Aito, it was found that 73% of Finnish consumers had tried plant-based products last year and this year the number had risen to 80%. This shows that although the number of vegans and vegetarians may be small, the Finnish population is more interested in trying plant-based products, and thus contribute to the demand of them. The anonymous interviewee also stated that they had observed many reports on Nordic consumers wanting to follow a more plant-based diet.

#### **4.1.3 Availability for Plant-based Food Products in the Nordics**

The current availability for plant-based products in the Nordic countries was also discussed with the interviewees. According to Riihimäki, following a completely plant-based in the Nordic countries is possible and availability for products is wide. The availability depends largely on what the stores decide to offer, but there is a versatile selection of products available. According to the anonymous interviewee, the availability in Finland is very good across the country, mainly due to large supermarket chains carrying many plant-based products in their selections, yet the availability is still the best in the capital region. Parlar stated that in other countries, plant-based products are often easy to find in large metropolitan areas but not in rural areas. In Finland on the other hand, their products are sold throughout the whole country, even in smaller towns. According to Kallio, availability and selection in the

Nordic countries, especially regarding oat-based dairy products, is very high compared to other markets. Kallio explains that “We can even say that here we are in an ‘oat bubble’, and in that sense we are absolutely forerunners in plant-based dairy alternatives.”

Kallio also mentioned the biggest decisive factors that affect people’s choices to buy plant-based food products in Finland. In the market research conducted for them, consisting of 1025 consumers, the three most important aspects that affected their choice to buy a plant-based product were price, taste and availability.

#### **4.1.4 Consumer Segments**

The interviewees were also asked what kind of consumers purchase plant-based products. Parlar stated that young adults are the key consumers who buy their products, women contributing somewhat more than men. Kallio reported that according to their market research, households of one and two, and consumers between the ages of 24 and 35 purchased the most plant-based products. In this report women also purchased more than men. According to the anonymous interviewee however, all kinds of consumers buy their products. Increasingly different consumer segments and people of different ages are purchasing plant-based products, not only young people from the capital region.

Lastly, interviewees were asked whether they consider the plant-based food market as a niche market in the Nordics. According to the anonymous interviewee, the plant-based market is not such a small niche in Finland anymore due to different kinds of consumer segments increasingly incorporating plant-based foods into their diets. Kallio stated that the market is still a niche in the Nordics but predicted it to grow exponentially. Riihimäki and Parlar also agreed that the plant-based food market can still be considered as a niche market.

## **4.2 Nordic Plant-based Food Companies**

The second section describes the findings regarding Nordic plant-based companies and how they have succeeded in the market. Interviewees were asked questions about how their company considers the varying reasons their customers purchase their products, what strategies they have to achieve a competitive advantage, how they conduct market research and what opportunities plant-based companies have that other companies might not.

### **4.2.1 Consumer Consideration**

As environmental and ethical concerns are often concerns for consumers who want to purchase plant-based products, interviewees were asked how their company considers these matters in their business activities. All companies operated in environmentally friendly ways, with varying methods. Riihimäki explained that Jalofoods previously sold the fiber waste from the soy they used as feed for animals. Even though it was also ecological, they now take the waste to a biogas plant and produce energy from it. They are also planning to open their own biogas plant and eventually use their waste to create energy for their own production.

The anonymous company also put part of their waste into biogas production and they make their plant-based product line packaging from recyclable materials. The company also recycles their remaining waste efficiently. The interviewee explained that they aim to respond to customer feedback regarding ethical and environmental concerns as much as possible. For example, they made a product that contained palm oil, which has a harmful impact on the environment, but after receiving feedback against it, they decided to eliminate palm oil from the product.

Parlar states that they always use recyclable plates and utensils if they have a pop-up stand somewhere and they have very low food waste. They also sponsor the Finnish animal protection organization Tuulispää, which mainly takes care of rescued farm animals. Kallio also states that they aim to be very responsible and prevent causing harm to the environment in the business activities of Kaslink Aito.

#### **4.2.2 Strategies for Competitive Advantage and Strengths in the Market**

Interviewees were asked about strategies that the companies used to achieve a competitive advantage and their strengths in the market. Riihimäki stated that they have been a market leader in their product segment for 30 years, and over time they have gained experience. Their strengths also included high-quality products made from clean ingredients, such as organic and Fairtrade soy and very pure water. Riihimäki also mentioned being a Nordic company as a strength, as well as having good and dedicated personnel. As for strategy, Riihimäki states their motto is “Keep your focus.” This means they stay focused on their product segment and aim to be the best in that category, the “niche of the niche” as he describes it. This is done by not wasting resources to act on every rising trend in the plant-based market.

The anonymous interviewee explained that they have a very recognizable brand that has become familiar to consumers over the three years they have been operating. They were the first to create plant-based products in their product segment, which has proved to be a strength for them. They also have reasonably-priced products and are accessible for many people. Their aim is to reach all kinds of consumers across Finland, and their strategy is competitive pricing and making plant-based versions of familiar foods.

Parlar believes Vöner has a strong brand and good products. He also mentions good personnel as a strength and explains their different marketing campaigns and co-operations with other plant-based brands have proven successful. They are very grounded in their values and have made a promise that their company will always stay vegan. Parlar explains that their strategy is to do things in their own style and create a good feeling around their brand that will resonate with consumers.

Kallio says Kaslink Aito is not marketed as a vegan brand. They aim to market their product for everyone and try to appeal to the masses rather than only focusing on niche customers. They focus 70 % of their marketing to masses and 30 % towards vegans. They want to send a message that nothing is restricted, and consumers don't have to be fully plant-based to buy their products, but by purchasing their products customers are making a more responsible choice that benefits the future of

the planet. Kallio argues “We won’t win the game with absoluteness.” Kallio also mentions that a large part of their strategy is to be innovative and create new products that plant-based customers are not even asking for yet. Pricing is also an important factor for the company, especially in order to appeal to the masses.

The interviewees were also asked about how they conduct market research. Some interviewees stated that they follow market research conducted by other companies and attend seminars, while some companies conducted their own studies. Kaslink Aito, for example, have a yearly study conducted by Nepa Insight on people who consume plant-based products and people who would be interested to try them and research what the consumers value in their purchase decision.

#### **4.2.3 Opportunities and Strengths of Nordic Plant-based Companies**

Another topic discussed in the interviews was opportunities and strengths that Nordic plant-based companies have. All interviewees agreed that one of the main ways plant-based companies can stand out is the fact that they can easily respond to the ethical and environmental concerns consumers have while companies who produce meat or other animal-based products might struggle with it. As awareness increases, companies have to be more transparent about their practices, which can prove difficult for companies with animal-based products.

All interviewees mentioned how the plant-based movement is getting a lot of attention in the media, on both traditional platforms as well as social media. Whether it is positive or negative discussion, all of it brings attention to the subject, which is a positive thing, Parlar explains. However, Riihimäki and Kallio agree that although there is a large media buzz around the plant-based movement, the change in consumption is still relatively small. The attention towards the subject is nonetheless spreading awareness and the anonymous interviewee explains that as consumer behavior continues to shift towards more plant-based products, plant-based companies are at an advantage in the market. Almost all the interviewees explained that getting their products to be a part of the regular diet of consumers was one of their main challenges and goals.

### **4.3 International Expansion for Nordic Plant-based Food Companies**

The third section explores findings related to international expansion. The interviewees were asked about their plans on expanding their business activities internationally and whether they already sold their products in other countries. Potentially good countries to enter were also discussed in the interviews. The interviews also contained questions on the strengths that Nordic plant-based food companies in particular had in international markets.

Jalofoods sells 40 % of their products in Sweden, 1 to 2 % in Estonia, and the remaining is sold in Finland. According to Riihimäki, they are looking mainly at the Baltic Sea area in regard to expansion, but Russia is seen as a risky market to enter due to financial risks, problems in food safety and difficulties in execution. He stated that the EU market would be much easier to enter and expand in. The growth potential for Jalofoods internationally is being successful as the “niche of the niche” in their product category by focusing on their Fairtrade and organic tofu products.

The anonymous interviewee stated that their products are sold only in Finland and the company is not planning to expand internationally in the near future. However, she stated that it is not a closed option either.

Vöner products are sold in Finland and Estonia at the moment, and soon in Sweden according to Parlar. He feels the biggest opportunities of growth for their company is in international expansion. Parlar has observed the European market and wants to be among the first to enter new markets in Europe where Vöner products don't yet exist.

Kaslink Aito products are sold in Finland, Sweden, Denmark, Estonia, Germany, the Netherlands and China according to Kallio. The brand is also entering new markets in other countries in the future. Kallio also views export as their biggest growth opportunity and their brand sees opportunities in entering new markets and changing consumption patterns there.

The interviewees were also asked questions about the strengths and opportunities Nordic plant-based food companies had in international competition. Riihimäki states that Nordic plant-based food companies have multiple advantages in international comparison. Nordic companies are often seen as ethical, ecological, quality-conscious and reliable. Food products from Nordic countries are what they say they are and there are no food counterfeits, which is a large problem in Russia and China, for example, according to Riihimäki. Nordic products are clean and as exports they have the image of being pure, natural and of premium quality. Finland and Sweden are also advanced in food technology and Riihimäki sees that as an opportunity and strength in the future. However, the scale and funds that Nordic companies operate with are much lower than in larger economies, such as Silicon Valley in the US, he says.

The anonymous interviewee also considered that Nordic plant-based products are viewed as pure and clean in the international market. Many Nordic plant-based companies have also been operating for a long time, which gives them an advantage to expand into new markets. Parlar agrees that Nordic plant-based companies have an advantage in international competition because of the experience in the market: “We are already many steps ahead compared to some other countries, if the whole movement is only beginning there. In Finland, for example, we have experience and product development is already so advanced that we can produce different kinds of products.”

According to Kallio, Nordic food companies in general are known for product safety, well-researched products, and use of high-quality ingredients, which are valued in other countries. Kallio also explains that Nordic oats and oat-based products have the potential to be very successful internationally. Nordic companies are forerunners in making innovations with oats and developing oat-based products. Exporting them internationally is a good opportunity for Nordic plant-based companies. Kallio quotes one of the owners of Kaslink Aito, who said that “Oats will be the new Nokia for Finland”.

Other countries that were mentioned to have relatively developed plant-based food markets were the US, UK and Germany. Also, Asia was mentioned to have a long

history in more plant-based diets but the market for, for example, plant-based alternatives to animal products was still viewed as underdeveloped.

#### **4.4 Challenges in the Market**

The fourth section summarizes the findings related to the challenges in market. The increasing meat consumption in the Nordic countries was discussed with the interviewees, aiming to find out what has caused the increase. The interviewees were also asked what their company's biggest challenges are in the market and what challenges Nordic plant-based companies face overall.

According to Riihimäki, although consumption of meat in the Nordic countries has increased, consumption of red meat is decreasing, and white meat is increasing. He saw that the main reason for the increase in consumption had to do with pricing. The price of meat has been reduced to a minimum and the industry is heavily subsidized. The industry can't sustain the low pricing of meat without the subsidies. Another factor that drives the price down is the increasing amount of imported meat. Local meat producers must lower their prices to be able to compete with the cheaper, foreign meat products. Riihimäki also mentioned that imported meat poses ethical risks when consumers don't know how animals are treated in farms in other countries, and animal welfare laws may not be as strict as in the Nordics. Riihimäki points out that it would be important to know how much locally sourced and imported meat is consumed in order to analyze the purchase decisions of consumers better.

Riihimäki also brings up meat's masculine image and how it affects consumer behavior. Traditionally, meat has a very masculine and primitive image, whereas vegetables and plant-based foods have a more feminine and soft image. He points out that plant-based food is also softer, lighter and gentler to the body, while meat is heavier. The popularity of gym exercise is another reason why meat consumption is increasing, and people are eating more calorie and protein dense foods to gain muscle.

Food culture also affects the consumption of meat. In the Nordic countries, there is still a strong food culture and traditions related to eating meat and other animal-



based products and consumption patterns don't change in a short time span, according to Riihimäki and the anonymous interviewee. The anonymous interviewee also mentioned that for older generations it is harder to change eating habits and give up animal-based foods.

Parlar and the anonymous interviewee were not sure of the exact reasons behind growing meat consumption, but the anonymous interviewee found it odd that meat consumption is rising even though there is so much attention in the media about plant-based products. The anonymous interviewee speculated that although some consumer segments have lowered their meat consumption, others have increased theirs considerably. The anonymous interviewee and Kallio both think that the consumers who are consuming more meat might be having a counter-reaction to the plant-based movement and don't really care about the environment or other issues regarding meat consumption. The anonymous interviewee also wondered whether the statistics of meat consumption are measured by how much people buy from stores or how much they report on consuming themselves. This could also affect how the statistics look.

Other challenges in the market for Nordic plant-based companies were discussed as well. Riihimäki states that a challenge for their company is making their product a part of people's regular diet. There is more of a psychological challenge in changing the thought process of the consumer than an availability challenge. The challenge is to be able to beat the flavor of meat products in order to appeal to the consumers. Riihimäki explains that even though their product would be as ethical and environmentally friendly as possible, if it does not taste good, people won't buy it. Parlar also stated that making products appeal to flexitarians is sometimes a challenge for them.

Increasing competition and saturation in the plant-based food market was mentioned by all the interviewees, and Riihimäki and the anonymous interviewee saw it as a challenge and threat. Parlar and the anonymous interviewee both agreed that there are so many new products and companies emerging in the plant-based food market that the competition to get on the supermarket food shelves will be a challenge for some companies. The anonymous interviewee also explained that supermarket

chains in Finland have strict price criteria for the products they sell, and this can also be a challenge for some companies. Riihimäki mentioned that keeping stable prices for their products can be challenging since production costs are rising and new investments are expensive. The saturation of the market can also be a threat for smaller companies, as the bigger plant-based companies have larger funds to invest into marketing campaigns. The anonymous interviewee also mentioned that new competing products to their product category could be a threat.

The anonymous interviewee also discussed political decision making and taxation as a current threat, but possibly an opportunity in the future. The government can favor the production of some products by subsidies and specific taxes. For example, the Finnish government subsidizes dairy in schools and the anonymous interviewee argued that if the subsidies would go towards the use of plant-based dairy products, it could be an opportunity.

#### **4.5 Future Outlooks of the Market**

The last section explores the findings related to the future of the plant-based food market and the outlooks for companies. The interviewees answered questions on how they predict the market will change in the short and long term, how meat consumption will develop in the Nordic countries, what kind of opportunities the future will bring for Nordic plant-based companies and whether they see the plant-based movement as a passing trend or not.

The interviewees were asked what kind of changes they could predict in the market for the next year. Riihimäki stated that the change is happening slowly, and the changes happening in the next year will be minor. However, all interviewees agreed that a lot of new competition will emerge, and the market will become more saturated. Parlar predicted that 2019 and 2020 will be the time when many new products and companies emerge, possibly to the point where supermarkets won't be able to offer all the incoming products for customers.

The changes in the next five years and onwards were seen as more significant. Kallio and the anonymous interviewee believe that the media buzz around the topic will

begin settling in to the consumption behavior of regular consumers in the Nordic countries. They also agreed that plant-based food will increasingly become part of the daily meals consumed by the general population. Political decisions and public-sector food was mentioned by many interviewees as an aspect affecting regular consumption of plant-based products. The anonymous interviewee explained that if governments change their food recommendations and thus, schools and daycares who follow the recommendations start implementing more plant-based protein and other foods into meals, it can have a significant impact on peoples' attitude towards food and encourage more plant-based eating. Kallio and the anonymous interviewee also agreed that as older generations pass, the future generations will be increasingly accepting towards new eating habits and plant-based diets. Kallio stated: "There will be a growing generation that won't care what white substance is poured in their glass when they drink milk. Whether it's oat milk, rice milk, almond milk or whatever else."

Some other future outlooks for the industry were also mentioned. The anonymous interviewee suspected that more plant-based companies from other countries will enter the Nordic market. Parlar predicted that the Nordic plant-based companies will be leading the plant-based food industry due to their expertise in the market and developed production technology. Parlar also predicted that plant-based seafood alternatives will be the next big trend in the plant-based food industry. Many of the interviewees also saw the biggest potential in the future market in flexitarians and larger masses changing their consumption patterns.

The interviewees were also asked if they thought the plant-based movement is just a passing trend or whether it will change consumption behavior permanently. None of the interviewees thought it would be a passing trend and agreed that it would shape the future of food consumption. The anonymous interviewee and Riihimäki both agreed that it could be considered a mega trend. The anonymous interviewee explained that it is not merely a diet trend, such as low-carbohydrate diets, because the reasons behind eating more plant-based foods are often related to other things in addition to personal health and well-being. The genuine concern for the environment is causing plant-based diets to be more than a passing trend. Parlar simply stated: "It is not a trend, it is a lifestyle".

The future of meat consumption was discussed with the interviewees. Riihimäki predicted that meat consumption will continue to grow in countries where wealth is rising, because meat has traditionally been seen as a sign of wealth. Countries such as China will increase their meat consumption in the future. Riihimäki also believes that cultured meat will reach the mass markets in the next five years. Parlar predicts that in ten years the growth of meat consumption will start decreasing significantly. However, he says it may be over 100 years until the plant-based food market would reach the same level of the animal-based food market. Kallio predicts meat consumption will start decreasing eventually, but it won't disappear entirely. In the future, the importance of plant-based products will increase.

## **5. DISCUSSION AND ANALYSIS**

The discussion and analysis section aims to analyze the qualitative data from the interviews and compare it with the prior research from the existing literature. This section aims to answer the research questions of the thesis. Therefore, this section will discuss the recent market changes and how the Nordic plant-based food companies have responded to them, the opportunities and strengths that forerunner companies have identified in the Nordic and international market and the future outlooks for the plant-based market.

The themes in this section are based on the themes in the findings and literature review. Some of the aforementioned topics are combined together in this section as they link together. This section will discuss the current state of the Nordic plant-based food market and the role of the companies in it, opportunities for growth as well as challenges and future outlooks in the market.

### **5.1 Nordic Plant-based Food Market**

The Nordic plant-based food market has developed substantially in the recent years and is evolving rapidly. The interviews provided an even deeper insight into the changes in the market and added value to the literature reviewed earlier.

Based on the findings in the research conducted, the demand for plant-based products has increased immensely, especially due to new consumer segments purchasing the products. Flexitarians and people who are interested to try and incorporate more plant-based products into their diet are making a large impact in the demand of products, as vegans and vegetarians are still a relatively small group of consumers, according to the interviewees. Although flexitarians were considered the largest growing consumer segment, vegans have had a huge impact on raising awareness on the subjects of animal rights, environmental concerns and health aspects leading to the large media coverage and attention over the phenomenon. Lappalainen (2012) also explained how animal activists are raising awareness on animal rights, even though they are often seen as very radical.

In the interviews it was found that the main consumer groups that purchase plant-based food products are younger people between the ages of 20 and 35, often households of one or two, with more women than men. Families were mentioned as an increasingly important consumer segment. Kirk (2018) stated that young consumers in Norway and Denmark are consuming more plant-based foods. In addition to that, there were not any statistics found in the literature review about the main consumer groups in the Nordics, hence the interviews provided additional value to analyzing the most important consumers. Younger generations were in general seen as more receptive to new food trends and should be the key segment for companies to focus on as they will shape the future of consumption.

When comparing the information in the literature and the interviews on availability of plant-based food products in the Nordics, the interviews provided a better insight as the experts had knowledge on what the store shelves are offering. The availability and variety of plant-based products is very large in the Nordic countries, especially in Finland and Sweden. In comparison to other countries globally, it is easier to find plant-based products also in rural areas in the Nordics, while internationally only the metropolitan areas offer a wider availability. It could be said that Nordic consumers, especially in Finland and Sweden, are living in a plant-based food product bubble compared to other countries.

In regard to the role of Nordic plant-based companies in the market, they have seen the opportunities to be successful and have been able to respond to the concerns that consumers have over the aforementioned subjects. As many of interviewees stated, the phenomenon is only really beginning currently, and the Nordic plant-based food companies are forerunners in a global megatrend of food consumption. In Lindgren's (2018) article, the emergence of plant-based food products in the market was said to be a global megatrend. Many of the interviewees mentioned that the market is becoming saturated with new products and companies emerging constantly, but almost all interviewees saw the competition as mainly a positive thing. It shows a sign that the phenomenon is gaining more attention and popularity and most importantly, the interviewees felt that all their competitors are bringing the message of plant-based products forward, which is a benefit for them too.

## **5.2 Opportunities for Growth for Nordic Plant-based Food Companies**

The two main opportunities for growth are appealing to flexitarians and mass markets as well as international expansion. A strictly plant-based diet can be too radical for many consumers and two of the interviewees as well as de Boer et al. (2014) explained that veganism can even cause a counter-reaction or resentment amongst some consumers, especially meat eaters. Overly pushing a certain agenda on customers can cause a negative reaction towards plant-based foods. Therefore, some companies focus more on marketing the product as simply a better option for everyone, not as a product that only vegans can consume. As awareness grows in the Nordic countries, encouraging people to make more responsible choices in food consumption is a good strategy for companies. Nordic plant-based companies usually aim to be ethical, environmentally conscious and make high-quality products, which is a strength as consumers find those qualities more important than before. It is nevertheless important to market products to niche customers as the market for plant-based products is still small, but there is a great opportunity in making plant-based food more accessible for everyone.

Nordic plant-based companies are forerunners in the market and have an opportunity to be market leaders in international expansion. The global megatrend is predicted to become more prominent in other countries in the future and Nordic companies have

many key strengths to enter those markets successfully. Nordic plant-based companies have experience in the market and advanced technology in food production, which will be valuable in achieving competitive advantage internationally. Furthermore, many interviewees mentioned that Nordic food and local ingredients are seen as clean and pure and the Nordic countries have a very good reputation with food safety globally. This will serve as an advantage in international expansion.

A key piece of information was found in the interviews that was not heavily emphasized in the literature review. In existing literature, the main reasons for vegetarianism or veganism were concerns over animal welfare, environmental and climate issues as well as personal health (Janssen et al., 2016; Ruby, 2012) and this was supported in many of the interviews. However, it was found only by Vainio et al. (2016) as well as NIBIO and Nofima (2018) that the biggest aspects for people choosing to buy meat over plant-based alternatives were price, taste and convenience. Kallio explained that in their market research, it was found that the main decisive factors for purchasing plant-based food products were primarily price, taste and availability. This seemed to be especially true with people who were more open to try plant-based products. What can be extracted from this information, is that when moving to consumer categories outside of people who follow plant-based diets, price, superior taste compared to animal-based products and availability have a much larger impact on the purchase decision than the motives related to animal rights, benefiting the environment or personal health. This is information that Nordic plant-based food companies should increasingly focus on when creating demand in new consumer segments and markets.

### **5.3 Challenges in the Market**

Although the plant-based movement is constantly gaining more attention and demand is growing, meat consumption has risen over the past years. Reasons found for this in existing literature and from the interviews were price, taste, convenience (NIBIO & Nofima, 2018), deeply rooted food culture and the masculine image of meat consumption. The meat industry is heavily subsidized, at least in Finland, which brings the price down for meat products lower than what would be sustainable without the subsidies. As the plant-based food industry is not subsidized, it can be a

disadvantage in competing with pricing. Creating products that flexitarians enjoy was also seen as a challenge at times. The meat industry and market for other animal-based products is still much larger compared to the plant-based food market and the change in consumer habits is slow. The interviews brought up that there is a psychological challenge to change consumer habits rather than an availability challenge. A challenge related to that mentioned by the interviewees, was getting their company's product to be a part of the regular consumption of consumers.

#### **5.4 Future Outlooks of the Market**

Even though the market was considered a niche market in the Nordic countries based on the conclusions made from the literature review and according to almost all the interviewees, the research suggests that it will change in the future over a longer time scale. Eventually meat consumption is predicted to decrease, and the popularity of plant-based food products is predicted to increase by the interviewees. In the future, plant-based meals were projected to become a more regular part of the diet for the larger population.

Younger generations were seen as the key consumer segment that purchase the products and families were seen as a growing consumer segment. In the literature review, it was found that 30% of young people in Sweden are already incorporating more plant-based foods into their diets and in Denmark, 8% of 18-35-year-olds considered themselves flexitarian (Kirk, 2018). This information offers insight for Nordic plant-based food companies on to whom to direct marketing. Flexitarians were also predicted to be the growing consumer segment in the future.

In regard to the literature and some of the interviews, governments were seen as potentially having a large impact on the future. The anonymous interviewee mentioned Canada's new Food Guide, which was also mentioned in the literature review by BBC (2019), Health Canada (2019) and Pointing (2019). If governments begin to advocate for more plant-based food products and offer more of them in public-sector meals, it could have a considerable effect on consumption behavior and reduce costs of public sector healthcare (Kirk, 2018). Additionally, taxation and subsidies could have an effect on the plant-based food industry.



As for the future outlooks of Nordic plant-based companies, taking the food technology, market experience and quality ingredients to the international market was seen as an opportunity to become market leaders.

## **6. CONCLUSIONS**

The concluding section of this thesis will summarize the findings to answer the research questions. The research questions for this thesis were (1) how Nordic plant-based food companies have reacted to the changes of consumer demand in the food market, (2) how forerunner companies have identified their opportunities in their niche market (both domestically and internationally) and (3) what the future outlook of the market is for the companies, especially regarding domestic growth and international expansion.

### **6.1 Main Findings**

To address the first question, Nordic plant-based food companies have successfully reacted to the recent changes in demand for plant-based products. They have used the growing awareness of issues in consuming animal-based food relating to animal welfare, the environment and personal well-being to achieve a competitive advantage in the market.

Secondly, the interviewed companies were able to identify multiple strengths and opportunities they have in their niche market of plant-based food products. Ethical and ecological production from high-quality Nordic ingredients, as well as experience and advanced technology were seen as strengths and also opportunities in domestic and international expansion. Many companies aim to create demand in new consumer segments, with a special focus on flexitarians, as they are a larger mass. Although the market is still seen as a niche, the aim is to become part of regular consumption for most people, not just strictly vegetarians or vegans. The significance that pricing, taste and availability have on consumers' choice to buy plant-based

products, could possibly be the key to entering larger consumer segments in the future.

The last question examines the future outlooks of the market from a perspective of domestic and international expansion. The market for plant-based product is still in a relatively early stage and is expected to grow rapidly in the next decades. Meat consumption does and will have an effect on the plant-based market, but the effect is predicted to decrease over a longer period of time. The Nordic plant-based companies are seen to have promising opportunities in international expansion and the market will continue to grow inside the Nordic countries as well. Especially Finland and Sweden are seen as market leaders currently, with the rest of the Nordic countries following.

## **6.2 Implications for International Business**

The study of the evolving market for Nordic plant-based food products offers useful information of the Nordic food market and forerunner companies. The research predicted that Nordic plant-based food companies will be industry leaders in the growing market for plant-based products internationally, and the change in consumption will eventually reach other countries. Studying the strategic approaches Nordic companies are taking, the industry predictions that experts have of the future, and knowing the strengths and opportunities, as well as the threats and challenges they face in the market can provide useful information for market research. Moreover, there is little existing academic literature strictly on the subject of the plant-based phenomenon in the Nordic countries.

Although the focus of the research was in the Nordics, and heavily based on the Finnish industry, all interviewees had knowledge about the global food market and how the plant-based market can and will evolve internationally. Three out of four of the companies that were interviewed operated internationally in different European and Asian countries.

Furthermore, the empirical research was based on the literature review, which included research conducted in many different countries by authors of many different nationalities.

### **6.3 Limitations**

The biggest limitation to this study was that all the interviewed companies were based in Finland. As the research studied the Nordic countries, a variety of interviewees from different Nordic countries and companies could have provided more insight on the topic. Although many of the interviewees were knowledgeable on the whole Nordic market, a large part of the empirical data was from a Finnish perspective of the industry. There was also substantial information on the Swedish market as it was seen as one of the market leaders with Finland, but there was much less data on Norway, Denmark and Iceland. This could have an effect on the results. Multiple companies were contacted from Sweden and Denmark, but none responded.

The methodological limitations include the assumption that all interviewees were telling the truth, sample size and possible translation errors. As the interviewees represented their own companies, there is a possibility that it affected their answers. If the sample size was larger and more diverse in different Nordic countries, the empirical data might have produced more findings. As all the interviews were held in Finnish, there is a possibility that translation errors occurred in processing the data.

### **6.4 Suggestions for Further Research**

Despite companies conducting their own market research, there is still not much academic literature on this subject. Therefore, there are many possibilities to further research this topic.

A larger study on consumer perceptions and purchase behavior regarding plant-based food products could be conducted in the Nordic countries. There are also hardly any accurate statistics on the number of vegans, vegetarians and flexitarians

in the Nordic countries, which could prove to be useful for companies to know. Applying a qualitative method would serve better for that type of research.

As the plant-based phenomenon was described as a global megatrend by the interviewees and as something that will shape consumer behavior permanently, there are multiple aspects that could be further researched. The UK, US and German markets were mentioned as markets with an existing plant-based movement. These are very large markets that the Nordic plant-based companies could enter. Further market research could be conducted in these countries to find the best strategies to succeed.

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# APPENDICES

## Appendix 1: The Question Plan for the Interviewees

**Interviewer:** Teresa Lehtinen

**Interviewee:** Name of Interviewee

This is a qualitative study to investigate how Nordic plant-based companies answer to the change in the market for plant-based products and what the future outlooks are for the market, both domestically and internationally. The selected interview method is a semi-structured thematic interview and all data will only be used for the bachelor's thesis of Teresa Lehtinen. The interview can be held in person or over the phone. The interviewees have the right to refuse to answer. The interviewee is also allowed and encouraged to add any relevant information even though it is not asked in the questions. The interview is recorded with the permission of the interviewee.

### Theme 1: Changes in the market

- How have you seen the change in consumer demand for plant-based products in the Nordic countries?
- What do you think is behind the change?
- Have the changes in the market affected your company? How?
- How do you perceive the popularity of plant-based food in Finland/the Nordic countries compared to the rest of the world?
- Why do you think Finnish/Nordic consumers want to buy plant-based products?
- What kind of consumers do you think buy plant-based products?
- Do you think that flexitarians play a role in the success of plant-based products in the Nordics? (Flexitarian: flexible vegetarian, who does not follow a specific diet but aims to eat more plant-based food than a person who follows a regular meat-based diet)
- According to current research, environmental and health concerns are the biggest factors driving demand for plant-based products in the Nordic countries. Do you agree with this and are these concerns important to your company?
- How does your company address ethical concerns about food in your operations?

## **Theme 2: Future outlooks of the plant-based food market**

- How do you predict the market and demand for plant-based products will change this year and in the next 5 years?
- Do you think the popularity of plant-based products and diets is a trend that will fade? Or is it something that will shape food perceptions permanently?
- What do you perceive as your company's biggest opportunities for growth in the future?

## **Theme 3: International Expansion**

- How would you evaluate the current availability of plant-based products in the Nordic countries?
- Do you sell your products internationally? Where?
- Do you have plans on expanding further internationally? If not, do you plan on expanding on a national level?
- Where do you see potential for success?
- What advantages do you think Nordic plant-based food companies have in international competition?

## **Theme 4: Challenges in the market**

- The consumption of meat has increased in the Nordic countries despite the popularity of plant-based products. What do you think is the reason for this phenomenon?
- How does the popularity of animal-based products affect your product development?
- How do you think meat consumption will develop in the future? Will it continue to increase or start to decrease at some point?
- What are the biggest challenges your company faces in the food market?

## **Theme 5: Company strategy to respond to the changes**

- Do you think the plant-based food market is still a niche market?
- What kind of strategic approach does your company have for competitive advantage?
- How does your company do market research and investigate changes in consumer needs and purchase motivations?
- What are your strengths and weaknesses in the business?
- Where do you see opportunities and threats?

- In what way do you consider the different motivations people have for purchasing plant-based products in your operations?
- In what ways is the plant-based market different compared to the regular food market? What opportunities do you see in the plant-based food market that might not appear in the regular food market?